

- b) Claims 3-5 measuring the particle speed
- c) Claim 6 temperature measurement
- d) Claims 7-8 gas measurement
- e) Claim 9 current/voltage measurement
- f) Claim 10 powder amount measurement

Group B. (directed to the material components)

- i) Claim 14 pure magnetite
- ii) Claims 15, 18 and 19  
magnetite with metal additions
- iii) Claims 16 and 18  
magnetite with intermetallic additions
- iv) Claims 17, 18 and 20-23  
magnetite with ceramic additions

Group C. (directed to the material form)

- 1) Claim 24 powder material with grain size
- 2) Claim 25 material in wire form
- 3) Claim 26 powder material made  
by spray drying
- 4) Claim 27 powder material made  
by agglomeration

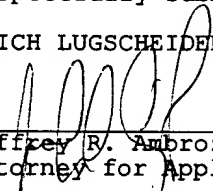
Applicant hereby elects to prosecute the claims of Group A drawn to the method, namely claims 1-12, amended claims 13-21, 23-27 and new claims 28-32.

Generic claim 13 has been amended to recite the method or process of Group A. Dependent claims 14-27 have been similarly amended to recite the process of Group A. Lastly, new claims 28-32, corresponding to amended claims 13, 19, 21, 23 and 24, respectively, have been added to better conform with U.S. patent practice.

If any fees are required in connection with this case, it is respectfully requested that they be charged to Deposit Account No. 02-0184.

Respectfully submitted,

ERICH LUGSCHEIDER

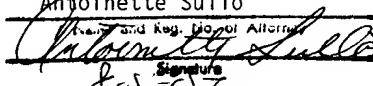
By   
Jeffrey B. Ambroziak  
Attorney for Applicant

Area Code: 203  
Telephone: 777-6628  
Reg. No. : 19,374  
Telefax : 865-0297

Date: August 5, 2002

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AMENDED CLAIMS

13. (Twice Amended) A [material] process for producing a corrosion- and wear-resistant layer on a substrate by thermal spraying[, by a process] as set forth in claim 1 characterised in that it has at least 20% by weight[, preferably more than 30% by weight,] of magnetite ( $\text{Fe}_3\text{O}_4$  and/or  $\text{FeFe}_2\text{O}_4$ ).

14. (Amended) A [material] process as set forth in claim 13 characterised in [that characterised in] that [it] the material comprises pure magnetite.

15. (Amended) A [material] process as set forth in claim 13 characterised in that [it] the material comprises magnetite and at least one further metallic material.

16. (Amended) A [material] process as set forth in claim 13 characterised in that [it] the material comprises magnetite and at least one intermetallic compound.

17. (Amended) A [material] process as set forth in claim 13 characterised by an addition of carbide or carbides or nitride or nitrides or silicide or silicides or boride or borides or oxide or oxides in the material.

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18. (Amended) A [material] process as set forth in claim 13 characterised by the addition of a mixture of metals, intermetallic compounds, carbides, nitrides, silicides, borides and/or oxides in the material.

19. (Amended) A [material] process as set forth in claim 15 characterised by magnetite and an addition of up to 50% by weight[, preferably up to 40% by weight,] of Cr, CrNi or a ferritic steel in the material.

20. (Twice Amended) A [material] process as set forth in claim 13 characterised in that [it] the material comprises magnetite and carbides of W, Cr, Mo, Nb, Ta, Ti or V.

21. (Amended) A [material] process as set forth in claim 20 characterised in that [it] the material comprises magnetite with an addition of up to 30% by weight[, preferably up to 20% by weight,] of tungsten and/or chromium carbides.

23. (Amended) [A material as set forth in claim 22 characterised by] A process as set forth in claim 13 characterised by a mixture of magnetite and chromium oxide in the material with a proportion of the chromium oxide of between

1 and 40%[ by weight and preferably between 5 and 30% by weight].

24. (Twice Amended) A [material] process as set forth in claim 13 characterised by a grain size of the powder spray material of between 0.05 and 150  $\mu\text{m}$ [, preferably between 0.1 and 120  $\mu\text{m}$ ].

25. (Twice Amended) A [material] process as set forth in claim 13 characterised by a filling wire in the form of wire spray material whose filling comprises magnetite and whose sheath comprises an alloy.

26. (Twice Amended) A [material] process as set forth in claim 13 characterised by a powder grain with good flow properties, which is produced from the powder material mixture by spray drying.

27. (Twice Amended) A [material] process as set forth in claim 13 characterised by a powder grain which is resistant to separation of its mixture and which is produced from the powder material mixture by means of an agglomeration process.